

W5YI

National Volunteer Examiner Coordinator

REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

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ARRL TO PETITION FOR CODE FREE HAM CLASS

"It was a very difficult issue for the Board to deal with because there were strongly held views at opposite ends of the spectrum. There were a number of proposals for different things. We started out with the committee report and proceeded from there to discuss various amendments to it. There had been many other options considered informally during the preliminaries. People should be reassured that the Board gave this subject very, very deep and careful consideration in order to find something that would simultaneously achieve the objective of those who desire a codeless license ...while making the package something that should be completely acceptable to those who do not share that view." **Dave Sumner, K1ZZ, ARRL Executive Vice President.**

Directors of the American Radio Relay League, held their second Board meeting of 1989 in Windsor Locks, Connecticut, on July 21 and 22. Acting on recommendations of their no-code study committee, the directors agreed that the time had come to support a class of amateur radio operator license which did not require knowledge of Morse Code.

A special blue ribbon no-code panel had been appointed by ARRL President Larry E. Price, W4RA, in January to explore the implications of a no-code amateur license. That committee consisted of representatives from the ARRL leadership, the ham radio industry, individual amateurs at large and the presidents of the Quarter Century Wireless Association and Canadian Radio Relay League as a liaison to their organizations.

The study committee reviewed a wealth of input from interested individuals and Amateur Radio clubs, as well as information it had requested from International Amateur Radio Union (IARU) member societies in other countries which already have a code-free class of amateur license. The committee submitted their report to the ARRL Executive Committee on April 1. The Executive Com-

mittee authorized publication of the report in the May QST and referred it to the full Board of Directors for consideration during its July 21-22 meeting.

Basically the code-free license committee recommended that a new class of license be created similar to the requirements of the Technician class but without the 5 WPM code requirement. To obtain this license, an applicant would be required to pass the present test Element 2 (Novice) and Element 3A (Technician) written examinations under the three examiner VEC System. To upgrade further, the applicant need only pass the Novice code (Element 1A) examination at five words per minute which also must be administered through the VEC System.

The no-code committee recommended no-code licensees receive distinctive call signs from the 2X3 format "NA#" prefix block. Privileges accorded to the new code-free class would be those now allowed to the Technician except only limited 2-meter digital privileges at 144.9 to 145.1 MHz. The panel suggested the new class be named "Technician" and with present Technicians being called "Technician Plus" ...for Tech plus code.

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DELIBERATIONS BY THE LEAGUE...

The directors felt that regular Group "D" call signs should be issued so newcomers could easily and transparently blend into the existing amateur community. There was a strong desire not to create two different amateur radio groups ...one made up of people licensed under the existing structure and a second one developed through the codeless license route. "The majority of the Board felt that a distinctive call sign would 'brand' new licensees as being different," Sumner said. "They wanted to 'mainstream' Communicator licensees."

- No directors supported the Technician/ Technician Plus titles suggested by the no-code committee. They thought it was too confusing. The term "Specialist" was considered, but the directors settled on the name "Communicator" since it more accurately described the anticipated activity of code-free licensees. "The FCC has already programmed that name into their computer systems from an earlier proceeding. They have a [software] slot already set up ...let's go with it," a director suggested.

To preserve the credibility and integrity of the proposed "Communicator" class, the directors felt it important that it fall under the three examiner VEC System which is perceived as being more reliable. Communicator applicants will be asked questions related to the Morse code to instill in them that it is indeed a basic part and tradition of amateur radio. It is unclear, however, whether candidates will be tested on code character recognition. "You could fail every one of those questions," Sumner told us, "and still pass the element. It won't be a code requirement in disguise."

Although the ARRL study committee suggested a thirty question written test, the directors did not further address the examination to be administered. A 25 watt power limit was considered and rejected as not being adequate for satellite communication.

"While we agreed that we need additional six meter activity," one director told us, "we have a lot of fear about TVI at a time when we need public support to make it all work. There are too many Channel Two's. We don't want to create an 'image' problem or intensify the pressure for 'quiet hours.' We plan a campaign to educate the public

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER?

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ur Extra Class license the following signed statement and a

"I am a currently licensed Extra Class amateur radio operator and wish to be a voluntary examiner. I have never had my station an operator license revoked or suspended. I do not own a significant

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about ham radio ...who we are, what you can do and why you should be one, too." The League's desire is to use the new Communicator class to promote amateur radio to those who may have never considered the desirability of becoming an amateur radio operator.

"We held out two meters to give newcomers something to shoot for," our director source said. "It is a juicy band and hopefully they will want to upgrade to get on with all their buddies. We did not go along with the [no-code committee] recommendation to give no-code licensees two-meter digital privileges because the packet people said it was already getting crowded. We also want to open up packet activity in other bands."

To code-free proponents, Sumner said "I hope that the degree of consideration and discussion that was given to the various possible ways of implementing this by the board will reassure them that the Board was genuinely trying to find something that would achieve their objective. I hope that everyone that supports the concept of a codeless license will get behind this design ...even if it doesn't have everything in it that they might have wanted to see. If a consensus can be established among those who support the concept ...the prospects for early adoption would be very good."

"To those who oppose the concept, I think that the Board has tried to address their concerns and to provide some reassurance that the Board is doing its best to preserve the essence of Amateur Radio in a changing world. I am very proud of the Board for what it has done. Without exception, the Board members acted as statesmen on this issue. It is our intention to move as quickly as possible to file the petition for rulemaking." Sumner said the goal is for League counsel, Chris Imlay, N3AKD, to submit the petition within a matter of weeks.

HAM RADIO LICENSE FEES PROPOSED

The House Energy and Commerce Committee has voted a 12.6 percent across-the-board increase for the FCC's so-called "cost of regulation" fees. The fees detailed in the FCC Budget Reconciliation Provisions apply to applications for licensing or paperwork processing in just about every radio service. There is a parallel move afoot in the Senate Communication Subcommittee and the ARRL is closely monitoring both of these. The League is, of course, dismayed that the subject of

amateur license fees has been raised so suddenly and without opportunity for public input.

The \$42 million generated by the fees would not go to the Commission directly, but to the Treasury to reduce the deficit. The fees range from \$30 for many routine actions ...to \$70,000 for application for authority to launch and operate a communications satellite.

At its July 21-22 meeting, the ARRL Board adopted a policy to oppose any fees for Amateur Radio station and operator licenses that exceed either the actual cost of administration, or the fees charged for any other licenses used for non-profit purposes; to oppose any fees for license modifications or upgrades, except those used to reimburse VEs and VECs for their expenses; and to oppose fees for reciprocal permits or for RACES, military recreation, or school club licenses. In the fight, the League will be using the Capitol Hill resources it developed in the so-far-unsuccessful defense of 220-222 MHz.

The Amateur Radio Service, currently exempt from FCC fees because of its noncommercial, public-service use, would begin a \$30 fee for new licenses, modifications, renewals, reciprocal permits and renewal or modification of club, RACES or military recreation station licenses. Collection of the fee would present a burden to the amateur community since all applications for new and upgraded licenses now pass through volunteer examiners before forwarding to the FCC. VE's could be required to collect the fee for the government.

General Mobile Radio Service fees stay at \$30. CB radio, which does not require licensing, is not affected. Cellular telephone license fees would be in the \$30-\$600 range depending on the action required. The cellular license fees are for cellular carriers, not end users. End users have no license or FCC fees. Fines for violating FCC rules would increase in many cases from the standard \$500 ...to a whopping \$6,000.

The House budget bill includes fines for obscene and indecent telephone communications. This provision is primarily aimed at so-called "Dial-A-Porn" messages. Although we have not seen the wording, it is believed the rider might also apply to Amateur Radio communications. The Supreme Court recently upheld the banning of

"obscene" telephone messages but said restricting access to "indecent" phone calls violates the First Amendment.

The House committee also added an amendment that reinstates the Fairness Doctrine which was repealed by the Commission in 1987. The provision would require broadcasters to afford "reasonable opportunity for the discussion of conflicting views on issues of public importance."

The FCC has long opposed the Fairness Doctrine, and a previous attempt by Congress to codify the doctrine into law was vetoed last year. The inclusion of these two controversial riders will undoubtedly complicate the bill's passage.

CT-2: THE COMING EXPLOSION

The *Emerging Telecommunications Technologies Act of 1989* (covered in our last issue) was introduced into the House on July 21 as HR.2965. The legislation proposes to reallocate 200 MHz of choice government radio spectrum to the private sector for use by developing commercial communications technologies.

Just a few months ago, communications circles were abuzz over the massive potential of High Definition TV. But in recent weeks, a new communication system -- CT-2, or second-generation cordless telephone -- has started cash-register sounds ringing in the heads of entrepreneurs across the country.

CT-2 is England's digital pocket wonder that offers wireless telephone connections in the home, workplace and public places. It's now being portrayed by some as the next huge boom (or bust) since the FCC opened up the floodgates for cellular telephone licenses. We described CT-2 and its rival standard DECT (Digital European Cordless Telephone) in our last report (see Vol. 11, Issue #14). Basically CT-2 uses cordless phone technology to connect portable, mobile and pocket-size telephones to low-power "phonepoints" scattered around the countryside.

Capitalizing on the massive interest, and eager to appear "with it" in the latest communications technologies, the FCC hosted a conference in Washington on CT-2 on Tuesday, July 11. The FCC's timing must have been perfect, because the event played to a packed house. Three overflow

rooms had to be opened to hold the hordes of investors, attorneys and lobbyists who watched the meeting squinting at closed-circuit TV screens if they were unlucky enough to be crowded out of the main room.

Some of the attendees we talked to were obviously eager to apply for CT-2 licenses, and were visibly impatient with the FCC's noncommittal position on CT-2 spectrum allocations. Others recommended a cautious approach, suggesting that CT-2 technology should be refined and improved before unleashing it on the consumer -- lest we experience another CB boondoggle or interference mishmash as is the situation with many current cordless phones.

Still others representing cellular telephone carriers were plainly suspicious of any new technology that could compete with the cellular phone -- particularly a \$200 unit that slips easily into a pocket and can work where cellular signals can't penetrate.

There was a bit of the vaudeville atmosphere, as a representative of DECT accused a representative from CT-2 of bringing a wooden model of a CT-2 portable phone to the FCC instead of a working product. "It's not wood! You can hear it bleepin'!" the CT-2 fellow replied pointedly.

One executive told the audience, "There's a tremendous market in the U.S. for universal personal communications. CT-2 is a necessary first step. Unless the U.S. jumps into this thing right now with both feet, it will seriously endanger missing what we believe will be a \$150 billion market worldwide." He said he believes cordless communications to be as important as High Definition TV ...and should require as much attention from the FCC.

"I really don't believe we can get full DECT until 1994 or 1995," he said. "CT-2 has a much lower infrastructure cost. We see a migration from CT-2 to DECT after the market is proven; that's the way it will happen in Europe and that's the way it should happen here."

Several attendees asked if CT-2 could enter the U.S. market on an unlicensed basis via §Part 15 rules. A speaker from British Telecom noted that CT-2's low power (about 10 mW peak) might work under the FCC's §Part 15 regulations,

NOVICE AMATEUR RADIO COURSE - Complete with 2 cassette Morse code course and illustrated textbook. Everything you need to know to become a ham radio operator. Audio cassette. \$19.95 plus \$2.00 shipping. New \$Part 97

AMECO LICENSE PREPARATION MANUALS - Contain all Amateur Radio Examination questions, multiple choices, correct answer identified - and explanation why answer is correct. Technician/General Class

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but that a dedicated 4 MHz band at 800 MHz will be used for CT-2 in Britain.

The questioners may not have considered that should CT-2s be implemented in the shared §Part 15/amateur bands, the wrath of the ARRL could likely be intense (see §Part 15 story on page 9 of this issue.)

Julius Knapp of the FCC Office of Engineering and Technology said, "Obviously, when we're talking about new radio services, a key question is what frequencies are available. One path that we would like to trumpet is to take advantage of the flexibility that we have already given to existing services. The FCC has granted flexibility to cellular service providers to offer alternate technologies. That opens up some possibilities for looking at cellular as more than a car phone. Another path is to request changes in the table of frequency allocations. Your best bet there is to try to come up with some clever way of sharing with an existing service. It's easier said than done. The other option of trying to displace existing users is one that everybody dreads."

A representative from the Canadian Dept. of Communications (DOC) announced a Fall release for a Gazette Notice (similar to the FCC's *Notice of Inquiry or Proposed Rulemaking*). The Notice "will be an invitation to come forward to experiment with low-power wireless technologies, including CT-2, for the next 18-24 months," he said. Issues to be examined include a possible frequency band, common industry standards and number of competitors to be permitted. CT-2 operates just below the 900-MHz band in England.

The DOC will strictly regulate the Canadian trials. No sales of equipment to consumers will be permitted and there will be no interference protection of experimenters, who must remove all equipment when the trials end. The frequencies used in trials may not be permanently granted. Possibilities for common U.S.-Canada systems will be explored, though Canada will implement these new radio services independently if necessary.

It does not appear that the experiment will be conducted in the 902-928 band which is allocated in ITU Region 2 to mobile, fixed, amateur and industrial uses. Canada is looking towards a primary, exclusive allocation for low-power personal communication services ...and not shared

spectrum. If Canada allocates exclusive spectrum to the service, pressure will undoubtedly increase on the FCC to do the same thing. In recent years, the Commission has rejected several proposals from the *Electronic Industries Association* and manufacturers for more cordless phone spectrum at 220, 460 or 900 MHz.

DECT is hot on the heels of CT-2. The final specifications for DECT are due in mid-1991, with delivery of the first test systems by the end of 1991. The first systems using "DECT-type technology", however, will be on the market on a full commercial scale during 1990. Some believe that CT-2 systems will eventually be modified into DECT systems because of DECT's potential for advanced features like microcell hand-off from one coverage zone to another.

DECT will be available as a wireless private branch exchange (PBX) for office buildings and factories. This enables businesses to avoid the expense and disruption of "adds, moves and changes" when telephone and computer wiring must be modified. You simply take your pocket phone, desk phone or PC modem with you and operate it in any location. Transceivers will operate through small antennas and leaky coax installed throughout the building.

DECT will also be available as a telepoint (public radio payphone) service on a trial basis in Europe. These systems will operate in the 900 MHz band, but will include all the properties of the full DECT standard which is expected to get spectrum at 1.8 - 1.9 GHz throughout the European Community.

The wireless PBX, telepoint and consumer cordless phones could eventually combine with cellular networks in the *Future Public Land Mobile Telecommunications System (FPLMTS)* now being studied by the ITU for possible spectrum allocation at the 1992 WARC. FPLMTS will unite all types of common-carrier mobile radio into an international network beginning in the late 90s. It will require somewhere between 100-200 MHz of spectrum below 3 GHz.

Lobbying at the FCC has already begun to allocate spectrum to CT-2 for eventual development into DECT and FPLMTS. The argument is without bold FCC action, the U.S. will fall further behind in international electronics markets and will

lose even more to the Japanese and Europeans. So far no formal FCC proceedings have appeared yet. The FCC's position has been that if the public wants CT-2 the business should go to cellular telephone companies who can operate the service within their own spectrum. This approach has not met popular acclaim in the industry so far. CT-2 and DECT technology may be incompatible with cellular. Also, doing cordless CT-2 in the cellular band may freeze out competitors who are not cellular companies. It may require those who do enter the market to pay cellular for the use of the spectrum, resulting in higher costs for the consumer. In the Canadian CT-2 trials, experimenters will have use of the cellular spectrum whether or not they are licensed cellular carriers.

The British Telecom representative said that CT-2, DECT and FPLMTS "...will move us towards the ultimate personal communicator around year 2000-2005. But there is a market now, and we should go for it!"

QUOTATIONS FROM CHAIRMAN DOS

Microsoft Corp. co-founder and chairman Bill Gates has been touring the country lately speaking at computer user group meetings. Microsoft's MS-DOS has become the most widely used operating system for personal computers, running on over 30 million machines. The company is pressing ahead with Windows, the graphics system behind its best-selling Excel spreadsheet; and with OS/2, a next-generation PC operating system which is off to a slow ...but steady start.

Just when you thought the 80386 was more advanced than most of today's (or even tomorrow's) software could take advantage of, during his Washington DC appearance Gates announced yet another new microprocessor chip: the 80586, under development by Intel Corp. with input from Microsoft.

The chip will be blindingly fast. By way of comparison, the latest-generation 80386 running at 33 MHz is capable of 8 million instructions per second (MIPS). This chip is now standard equipment in many PCs. The just-introduced 80486 -- with more than one million transistors on its small surface -- operates at more than 16 MIPS. The forthcoming 80586 will be "3 or 4 times faster" than the 80486, Gates told a stunned audience.

"The bottom line of all this is that in a totally compatible fashion, without any difficulty with the diskettes and software you have today, over the next 5 years we will be able to take PCs up to 100 MIPS -- far faster than any mainframe computer runs today."

"What are we going to do with all this speed? Should you use the existing chips and buy them as they become less expensive, or should you move up to these fantastic high-speed chips? The answer will only come as the software industry takes this speed and turns it into interesting applications."

Microsoft is trying to take advantage of these new capabilities with OS/2, which has received a skeptical response from much of the user community. "Why do we need a new operating system? This is a question we are asked daily," Gates said, to considerable laughter from the audience. "To the degree people are happy with DOS and do not run into memory problems, those short filenames don't bother them, the inconsistency of user interface, conflicting terminate-and-stay-resident [TSR] programs, the fact that every application has to have its own device drivers [such as for screens and printers -Ed.] -- if those limitations are not getting in people's way --and in many cases they are not -- then DOS will be the right operating system and DOS sales will continue to grow over the next 5 years."

"We will continue to enhance DOS. We can't do anything dramatic, because we don't want to increase its size. That would exacerbate the problem we have today of limited memory. But we can make the utilities better, we can better exploit extended memory, and we can encourage users to buy the optional add-on product Windows that provides a graphics interface and brings a substantial improvement to machines that have at least 640K of memory and use the 80286 or 80386 microprocessor."

An audience member who uses Windows asked Gates why the product was "clunky" and slow. Gates replied that if the current version of Windows does not have as much of the 640K memory as possible devoted to it, it won't work well. Many of Windows' speed problems will apparently be fixed in the next version, now being tested, which will be able to use the "protected mode" and above-640K memory capability of the

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80286 processor, features left unused by most MS-DOS software today.

The OS/2 operating system can run multiple applications at the same time, a benefit that Gates said his company has not explained as well as it could. "The benefit of running multiple applications is partly that you can interrupt yourself, do something else, go back to another application. Or you can do background communications and background [printer-type] spooling. ...But those are not the primary reasons why running multiple applications is important. The primary reason is that it changes the way that applications are designed."

"Rather than having a single application that takes over your system, uses up all the memory, and tries to meet all of your needs, you [will be able to] work with applications as a group and move data between them. ...It will simplify the creation and use of applications and allow people to set up applications the way that they can't do it today unless they are experts."

"All of this power of chips and operating systems is irrelevant if it doesn't lead to applications, so what we are trying to do is make the job of the office worker more productive and more interesting. Our vision is that you should be able to walk into your office and have at your fingertips all the information you're interested in -- project schedules, what are resource availabilities, expenses and budget. All of these things should be just a few clicks away on your mouse. If there's anything that strikes your interest, you ought to be able to click in and see additional detail. The type of information that people are interested in is fairly predictable. By moving into a structured form and getting the right kind of tools available on their machines, people will feel very empowered to understand what's going on and to plan out new ideas in ways that have not been possible in the past."

"In fact, personal computing today has delivered on only a very small part of that promise. Personal computing today is simply providing the power to do word processing and spreadsheets. That's important, but it isn't enough to justify the use of PCs on a widespread basis. Use of PCs on all the desktops will only take place when the PC is a communications tool to all the data that is there."

• The **trademark infringement lawsuit** between Palomar Engineers, RF Limited, RF Parts Co., and Westcom has been concluded. Palomar Engineers, Inc. is the owner of the Federal Trademark registration for the name *Palomar* in the radio equipment field, and conflicting uses of the name *Palomar* have been terminated.

• Alvin Glaze, a Louisiana Forestry ranger recently **survived a 180-foot fall** from a radio tower in Baton Rouge. Glaze was dismantling an antenna when he slipped from the top of the tower. He fell backward onto one of seven sets of guy wires and rode the cable for 40 feet before letting go due to pain. He landed on another set of guy wires and managed to slide to the ground. He was cut about his arms, hands and leg, but no broken bones. He had his safety belt around something that was not secure.

• The **National Radio Quiet Zone** (NRQZ) in Virginia and West Virginia will remain just that, *quiet*. The FCC has dismissed a petition seeking to allow higher RF power in the area after its largest radio telescope collapsed six months ago. The Commission decided the NRQZ should remain intact because of the continued use of other telescopes at Green Bank and the possibility of rebuilding the huge 300-foot dish.

• Effective in January 1990, the **ohm and volt values will change** worldwide which means sensitive instruments will have to be recalibrated! The volt will change 9.2 parts per million ...while the ohm will change about 1.7 ppm according to the National Bureau of Standards. The change is the result of four different values being used worldwide and a discovery that the value, last adjusted in 1972, was slightly wrong. All countries will make the change simultaneously.

• **UPS has recently broke ground** on a new telecommunications and information center in Mahwah, New Jersey. The \$80 million data center will serve as the hub for UPS' 1,750 facilities worldwide. UPS is in the process of upgrading its global package-tracking and tracing network, UPSNet. The network will be completed in January 1990. The recent reallocation of 220-222 MHz to narrow-band commercial use will play a key role in the network.

The FCC has **turned down a Freedom of Information request** from Duane Delorey, N8EZW,

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- Effective July 1, **amateurs in England may use** phone, RTTY, data, Facsimile and slow-scan television in the 18.068-18.168 and 24.890-24.990

AMATEUR RADIO QUESTION POOLS
Order From: [redacted] Contain all...

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bands. U.K. amateurs were previously restricted to Morse code only. The *Radio Society of Great Britain* recommends U.K. phone operation between 18.110 - 18.168 and 24.930-24.990 MHz. in accordance with ITU Region 1 band plan.

JUNE AMATEUR LICENSING STATS

<u>June</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	
New					
Amateurs	2028	1850	1494	2003	
<u>Upgrading:</u>					
Novices	962	2258	1300	1361	
Technicians	348	466	400	395	
Generals	407	501	312	279	
Advanced	<u>301</u>	<u>381</u>	<u>247</u>	<u>200</u>	
Total:	2018	3606	2259	2235	
<u>Renewals:</u>					
Total Renew:	1809	3711	2366	*241	
Novices	148	333	203	*38	
<u>Purged:(*)</u>					
Total Drop:	1766	1813	1298	1729	
Novices	1285	1258	669	839	
<u>Census:</u>					
Indiv. Oper.	418279	429491	436403	459307	
Change/Year	+9211	+11212	+6912	+22904*	
<u>Indiv. Operators by Class:</u>					
<u>Extra</u>	<u>Advan.</u>	<u>General</u>	<u>Tech.</u>	<u>Novice</u>	<u>Total:</u>
<u>June 1986:</u>					
39776	97970	116606	84985	78942	418279
9.5%	23.4%	27.9%	20.3%	18.9%	100%
<u>June 1987</u>					
42515	98018	114969	89167	84822	429491
9.9%	22.8%	26.7%	20.8%	19.8%	100%
<u>June 1988:</u>					
45399	98343	113342	97518	81801	436403
10.4%	22.5%	26.0%	22.4%	18.7%	100.0%
<u>June 1989:</u>					
48711	100808	115686	109296	84806	459307
10.6%	21.9%	25.2%	23.8%	18.5%	100.0%
Club/RACES	(1986)	(1987)	(1988)	(1989)	
& Military	<u>2727</u>	<u>2444</u>	<u>2353</u>	<u>2474</u>	
Total Active	421006	431935	438756	461781	
% Increase	+2.2%	+3.2%	+1.6%	+5.3%*	

*Again, we remind you that the U. S. amateur service is **not really expanding at a 5.3% rate.** Due to the implementation of the 10 year term license in 1984, there were **18,849 less renewals this year.** (21,578 during the first six months of 1988, only 2,729 for the comparable period this year.) If you adjust for this difference, the number of U.S. amateurs would be up **less than 1%** over last year!

• A federal judge sentenced confessed computer hacker, **Kevin D. Mitnick, N6NHG**, of Panorama City, California, to a year in prison to be followed by six months in a residential psychological counseling program where he will be treated for an addictive personality. Mitnick pleaded guilty to computer fraud and having unauthorized MCI telephone access codes in his possession.

• Someone should tell Popular Electronics' editor, **Julian S. Martin, KA2GUN**, that Dah-di-Dah-Dit Dah-di-Dah-Dah is not "CQ." His page 2 editorial appearing in the August issue on the possibility of a code-free ham license has that as its headline. He asks for reader input on a no-code ham class and again concludes with: "Til then, listen for my Dah-di-Dah-Dit Dah-di-Dah-Dah."

• Five delegates from the **International Amateur Radio Network (IARN)**, headed up by **Glenn Baxer, K1MAN**, have been invited to visit the Soviet Union for two weeks in October. All expenses will be paid by the *Young Communit League* in Moscow. Purpose of the vist is to further develop many amateur radio projects underway ...and to lay the groundwork for further cooperation in several areas extending beyond amateur radio. Baxter also plans to present a paper at the *International Digital Symposion* in Minsk, USSR.

• We sold out of 2,000 **new \$Part 97 Rule Books** and had 2,000 more reprinted! Cost is \$5.00 postpaid for five booklets, \$2.00 if you only want one. (W5YI, Box 565101, Dallas, TX 75356.)

LATEST IN THE \$PART 15 BATTLE: ARRL KNOCKS INDUSTRY COMMENTERS

In reply comments filed at FCC, the ARRL has taken the opportunity to return fire at industry commenters opposed to League motions in the revision of \$Part 15. The revised \$Part 15 rules enable new types of low-power consumer and business radio devices to operate throughout the radio spectrum, including amateur bands. ARRL urged the FCC to keep those devices intended for residential use out of the ham bands.

ARRL argued that complaints to FCC of interference attributed to \$Part 15 devices show an increasing trend. From material obtained from the Commission's Field Operations Bureau (FOB) through the *Freedom of Information Act*, ARRL revealed these statistics:

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Part 15 Complaints Compared to Total:

<u>Fiscal</u> <u>Year:</u>	<u>\$Part 15</u> <u>Interference</u> <u>Complaints</u>	<u>Total</u> <u>Interference</u> <u>Complaints</u>
81	213	82084
82	215	75651
83	293	67879
84	302	67760
85	379	66794
86	367	63842
87	248	55813
88	502	44209
89 1st Quarter	182	11616

ARRL noted that the decrease in total number of interference complaints may be due to factors such as reduction in FOB staff and the resulting reduced ability of victims of interference to register their complaints. While the statistics are subject to interpretation, ARRL said they do "...show a significant and ominous changing ratio. There is a significantly increasing interference problem from \$Part 15 devices to other radio services."

In its engineering discussion, ARRL presented evidence that at 10-30 MHz, the new \$Part 15 permits up to 4 times the power as the old rules with respect to NON and CW emissions; and that above 30 MHz, the potential interference contour of \$Part 15 devices designed for both indoor and outdoor use in residential areas is enormous.

The League said that both FCC and General Motors, which had earlier criticized ARRL findings, had ignored the cumulative effect of \$Part 15 radiators. The League obtained a copy of a 1986 document from the *Interdepartmental Radio Advisory Committee's* Technical Subcommittee reviewing a draft of the FCC's proposed \$Part 15 revision. The IRAC subcommittee stated:

"The increasing consumer demand and the electronic revolution is expected to continue to escalate the production of increasing numbers of \$Part 15 devices where many will populate Government bands. The potential for thousands, possibly millions, of \$Part 15 emitters to crowd into a popular band will increase the background signal level. It is obvious that once interference occurs from such an aggregate, it cannot be eliminated even though the offending emitters are on a non-interference basis."

Some parties apparently pointed out that

Amateur Radio does not have primary status in certain bands shared with Industrial-Scientific-Medical operations such as automatic vehicle monitoring and government stations, where many of the new \$Part 15 devices are expected to transmit -- and thus amateurs should have little right to complain. ARRL called such an argument irrelevant, as those uses are uncommon in residential areas. "Even microwave ovens which use those frequencies are not now marketed widely, if at all."

The *Electronic Industries Association (EIA)* "opposes the League's effort to protect the consumer of home electronic equipment by providing even minimal RFI resolution information including a manufacturer's contact point, in the owner's or user's manual of the device," ARRL said. "EIA is happy to place the responsibility for RFI resolution on the non-technical consumer or the non-technical retailer, but not the manufacturer, which has failed to provide a product that will perform in the presence of nearby radio transmitters. EIA's claims that the marketplace will address RFI problems, and that in most cases, self-help is all that is required, are arguments that the Commission's Field Operations Bureau knows to be untrue. They ignore specific Congressional findings to the contrary, now 7 years old, and well-known facts about RFI resolution."

The ARRL *Petition for Reconsideration* of the \$Part 15 revision, as well as those petitions from other parties, are still outstanding. Besides Amateur Radio, the FCC is getting large numbers of objections to the new rules from carrier-current AM campus broadcasters. These are low-power stations that inject their signals through capacitor coupling devices into electrical power systems in student housing. Colleges that do not have ordinary FM radio stations often support vigorous on-campus AM stations using carrier-current. No license is needed and no FCC regulations other than the technical \$Part 15 rules apply to such broadcast stations.

The new \$Part 15 rules appear to require a substantial reduction in field strength at the low end of the AM band where these stations operate, and they seem to restrict the use of carrier-current transmitters only to certain types of locations. Carrier-current stations usually choose the low end of the band specifically to reduce interference, and many campus broadcasters are furious that the FCC would reduce their power levels because they located in those lower frequencies.